

PHNL030364

PCT/IB2004/050319

10

CLAIMS:

1. A method of placing at least one component (25) on at least one substrate (24), a component (25) being picked up by means of at least a placement machine (2) and placed on a desired position on the substrate (24), characterized in that after the component (25) has
5 been placed on the substrate (24), an image of the component (25) placed on the substrate (24) is made by a camera (5, 23), a difference between the real position of the component (25) on the substrate (24) and the desired position of the component (25) on the substrate (24) being established on the basis of the image, after which the positioning of a next component (25) to be placed is adapted on account of the difference found.
- 10 2. A method as claimed in claim 1, characterized in that first a same kind of component (25) is placed on a number of substrates (24) on substantially the same positions, while differences between the desired and real positions of the components (25) relative to the associated substrates (24) are determined, the positioning of a next component (25) to be
15 placed on a next substrate (24) being adapted on account of the differences found.
3. A method as claimed in claim 1 or 2, characterized in that first on at least one substrate (24) a number of different components (25) are positioned, the real positions of which are compared with the desired positions, subsequent to which the positioning of a next
20 component (25) to be placed on the substrate (24) or another substrate is adapted based on a statistically determined average difference.
4. A method as claimed in one of the preceding claims, characterized in that once a number of components (25) have been placed, the real positions are compared with the
25 desired positions.
5. A method as claimed in one of the preceding claims 1 to 3, characterized in that once each component (25) has been placed, the real position is compared with the desired position.
- 30 6. A method as claimed in one of the preceding claims, characterized in that components (25) are placed on at least a substrate (24) by means of a number of placement machines (2) located side by side, each placement machine (2) comprising a camera (5, 23) by means of which an image of at least a portion of the substrate (24) is produced to

PHNL030364

PCT/IB2004/050319

11

determine the difference between the desired and real positions of the component (25) placed on the substrate (24).

7. A method as claimed in claim 6, characterized in that from images produced
5 by means of the placement machines (2) of respective portions of the substrate (24) a joint image is produced of the substrate (24) and the components (25) positioned thereon.

8. A system suitable for implementing the method as claimed in any one of the
preceding claims, characterized in that the system comprises at least a placement machine (2)
10 and a camera (5, 23) cooperating with the placement machine (2), an image of a component (25) positioned on a substrate (24) by means of the placement machine (2) being producible by means of the camera, the placement machine further comprising a processor by means of a real position of the component (25) relative to the substrate (24) as well as a difference with a desired position of the component (25) relative to the substrate (24) can be determined from
15 the image produced by the camera (5, 23).

9. A system as claimed in claim 8, characterized in that a drive of the placement machine (2) can be adapted by the processor on account of the difference found.